

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-334981

(43)Date of publication of 07.12.1999
application :

(51)Int.CI.

B65H 35/07

(21)Application number :

10-146137

(71)Applicant CENTRAL GLASS CO LTD

(22)Date of filing :

27.05.1998

(72)Inventor : WATANABE HIROTAKA

(54) TAPE STICKING TOOL

(57)Abstract:

PROBLEM TO BE SOLVED: To easily and surely stick a tape to an edge part of a plate body by integrally assembling an unwinding reel for a tape wound body, a presser roller for the tape, and a bent member of the tape in a frame member in a tape sticking tool for sticking a protecting adhesive tape to the edge part of the plate body.

SOLUTION: When a protecting adhesive tape 5 is stuck to an edge part from the end face across the both side edges of the plate body 8 which is composed of a glass window material, at first, the tape 5 is led out from a tape wound body of an unwinding reel 6 in a tape sticking tool 1 through a presser roller 9 and a pair of pinch members 7, 7' so as to bring in contact with the end face of the plate body 8. After the side edges of the plate body 8 are pinched between the both pinch member 7, 7' and fitted in a pair of tape bent members 10, 10', the tape sticking tool 1 is moved in the Y direction along the end face of the plate body 8 and the tape 5 is folded up along the end face of the plate body 8 so as to be pushed against it. Then, when the whole circumference of the plate body 8 is wound around, the tape 5 is cut by a tape cutter 13.

CLAIMS

[Claim(s)]

[Claim 1] this tape attachment implement being in the end of the end face of a plate, and making it move along with the end face of a plate that the adhesive tape for protection should be stuck on the edge section applied to edges on both sides from the end face of a plate In the aforementioned tape attachment implement which sticks a tape over the edge section of a plate The rewinding reel of tape **** by which adhesives were applied to the internal surface of parietal bone, and the press roll on which the tape drawn from the reel is pressed and pasted up on the end-face section of a plate, The tape attachment implement characterized by consisting of a tape bending member of the couple which bends the tape both ends pasted up on the end-face section, applies to a plate end face and a side edge, and is stuck, and a frame member which included these rewinding reel, the press roll, and the tape bending member in one.

[Claim 2] The tape bending member of a couple consists of a piece of an end-face slide contact of a plate, and a piece of a side edge slide contact of the plate of the outside, respectively. the piece of an end-face slide contact The soffit touches the end-face both-sides section of a plate through a tape. the piece of a side edge slide contact That a flat tape should be bent crosswise gradually and the side edge of a plate should be made to stick and paste The tape attachment implement according to claim 1 characterized by **ing the bottom, extending towards the edges-on-both-sides section of a plate gradually, and the internal surface of parietal bone of the piece of a side edge slide contact touching the edges on both sides of a plate through a tape as there is the soffit almost flat-tapped with the soffit of the piece of an end-face slide contact and it went back in the front end section.

[Claim 3] The tape attachment implement according to claim 1 characterized by having allotted the **** member of the couple formed in the side edge section of a plate from the standup section of the ***** first portion, and the wave section which consists of the wave-like trough and wave-like crest of the section in the second half so that the crest of the aforementioned wave might be located underneath the press roll, and preparing a spacing between a press roll and the upper-limit side of a wave-like crest.

[Claim 4] A press roll, the tape attachment implement according to claim 1 characterized by preparing the tape cutter which cuts a tape suitably between tape bending members.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] Suitably, this invention relates to the tape attachment implement for sticking the adhesive tape for protection on the edge section beforehand, in order to protect the edge section in the time of an archive of glass-window material, such as sheet glass, laminated glass, and a multiple glass, a migration, and construction etc., a plate lacking in toughness, such as glass and a ceramics, and.

[0002]

[The conventional technique and its technical problem which should be solved] For example, in JP,63-12131,Y, it sticks on a plate surface periphery, pulling out a tape from the case which held the reel field of an adhesive tape in the tools which stick a tape on the plate surface periphery of a glass pane in advance of construction, a tape is bent in the corner section in a plate surface, and the tape bending attachment implement it enabled it to stick is indicated. This well-known example differs from what sticks a tape on plate table (reverse) side peripheries, such as a glass pane, applies to an end face and edges on both sides, and is stuck.

[0003] Moreover, to JP,61-151953,U, the attachment machine of a whorl adhesive tape stuck by the guide rail which suppresses the aforementioned adhesive tape to the end face of sheet glass, pulling out a whorl adhesive tape from a case and exfoliating a release paper leads, justifying a looping-around adhesive tape by the interior material of a proposal, and the guide member in JP,3-28710,A further, and the attachment fixture of an adhesive tape stuck on end faces, such as a glass plate, with a rolling roller is indicated, for example. Although these well-known examples stick a tape on end faces, such as sheet glass, it applies to an end face and edges on both sides, and they are not stuck.

[0004] this invention offers the tape attachment implement which sticks adhesive tape with an easy means, without the edge section applied to edges on both sides from the end face of a plate taking especially complicated technique.

[0005]

[Means for Solving the Problem] this being at the end of the end face of a plate in a tape attachment implement, and making it move along with the end face of a plate that this invention should stick the adhesive tape for protection on the edge section applied to edges on both sides from the end face of a plate In the aforementioned tape attachment implement which sticks a tape over the edge section of a plate The rewinding reel of tape **** by which adhesives were applied to the internal surface of parietal bone, and the press roll on which the tape drawn from the reel is pressed and pasted up on the end-face section of a plate, It is the tape attachment implement which consists of a tape bending member of the couple which bends the tape both ends pasted up on the end-face section, applies to a plate end face and a side edge, and is stuck, and a frame member which included these rewinding reel, the press roll, and the tape bending member in one.

[0006] The tape bending member of the aforementioned couple consists of a piece of an end-face slide contact of a plate, and a piece of a side edge slide contact of the plate of the outside, respectively. in addition, the piece of an end-face slide contact The soffit touches the end-face both-sides section of a plate through a tape. the piece of a side edge slide contact That a flat tape should be bent crosswise gradually and the side edge of a plate should be made to stick and paste Gradually, it **'s the bottom, and is extending towards the edges-on-both-sides section of a plate, and the internal surface of parietal bone of the piece of a side edge slide contact is made to touch the edges on both sides of a plate through a tape as there is the soffit almost flat-tapped with the soffit of the piece of an end-face slide contact and it goes back in the front end section.

[0007] In the above, it is desirable to allot the **** member of the couple formed in the side edge section of a plate from the standup section of the ***** first portion and the wave section which consists of the wave-like trough and wave-like crest of the section in the second half so that the crest of the aforementioned wave may be located underneath the press roll, and to prepare a spacing between a press roll and the upper-limit side of a wave-like crest.

[0008] Furthermore, it is desirable to prepare the tape cutter which cuts a tape suitably between the aforementioned press roll and a tape bending member.

[0009]

[Embodiments of the Invention] In this invention, although masking tape does not protect the chip crack protection from the edge section, and this section from external impact in the time of an archive of glass-window material, such as tabular glass, ceramicss, for example, sheet glass, laminated glass, and a multiple glass, a migration, and construction etc. and the tape quality of the material is not specified, metal tapes, such as resin tapes, such as various polyester tapes marketed, a polyolefine tape, and a vinyl tape, a zinc tape, a lead tape, and an aluminum tape, are applicable.

[0010] The example of operation is illustrated below and this invention is explained.

[Structure of tape attachment implement] view 1 the outline perspective diagram of the tape attachment implement of this invention, and the drawing 2 The outline perspective diagram and the drawing 3 having shown relation of a **** member and a plate The outline perspective diagram and the drawing 4 having shown relation of a tape bending member and a plate The partial front view and the drawing 5 having shown the frame member, and the rewinding reel and **** member of the tape attachment implement in X directional vision of drawing 1 The frame member of the tape attachment implement in Y directional vision of drawing 1 , a tape cutter and the partial rear view having shown the relation of a **** member, and the drawing 6 are U-U line cross sections of drawing 2 , and are a press roll, a **** member, and drawing having shown relation of a plate.

[0011] the tape attachment implement 1 -- setting -- the frame member 2 -- one side plate (A) three -- another side -- a side plate -- (B) -- three -- ' -- both sides -- a plate -- (A) -- (B) -- it should span -- proper -- having allotted -- a stop -- **** -- for example, -- four -- four -- ' -- **** -- becoming .

[0012] The rewinding reel 6 holding **** of a tape 5, for example, a zinc tape Side plate of the frame member 2 (B) It is that whose justification fixes to revolve free [rotation] to piece of extension 3" which extended to the front slanting upper part of 3', and is enabled in the orientation of an axial length of shaft 6'. it is shown in drawing 4 -- as -- the size of the width of face of a tape 5 -- responding -- width-of-face center-section 5' of a tape -- the side plate (A) of a frame member -- it adjusts and fixes so that it may be located in the center section of the spacing of 3 and side plate (B) 3'

[0013] In the lower part of the rewinding reel 6, it is a **** member (A) between the side plate (A) of a frame member, and (B). 7 and **** member (B) 7' is arranged in an object by transverse-plane (orientation of X) **, and the side edge of a plate 8, for example, a multiple glass, is put by both the ****s member (A) and (B). the **** member (A) 7 -- side plate (A) 3 -- **** member (B) 7' -- side plate (B) three -- ' -- supporting to revolve -- having -- respectively -- a side plate -- (A) -- (B) -- a contiguity -- isolation -- possible -- it can adjust -- both -- **** -- a member -- (A) -- (B) -- a spacing -- a center section -- the above -- a tape -- five -- width of face -- a center section It can scan by both the ****s member (A) and (B), without carrying out horizontal blurring of the tape attachment implement 1 along with the end face of a plate 8.

[0014] Both ****s member (A) 7 and 7' is ***** (Z directional vision of drawing 1), respectively. It is what arranges the press roll 9 so that it may consist of the standup (it is left-

hand side in drawing) section of the first portion, and the wave section which consists of a trough of the wave (it is right-hand side in drawing) of the section, and a wave-like crest in the second half as shown in drawing 2, and it may construct in the upper position of the crest of the aforementioned wave. As shown in drawing 6, D between the crests of the press roll 9 and a wave has a spacing before and behind 3mm. The press roll 9 is the aforementioned side plate (A). 3 and side plate (B) It is supported to revolve free [rotation] by the shaft which spans with 3', and has the operation which makes the end face of a plate 8 press and paste up a tape 5.

[0015] As behind the press roll 9 shows to drawing 3 between the side plate (A) of a frame member, and (B), it is a tape bending member (A). 10 and tape bending member (B) 10' is allotted to an object by transverse-plane (orientation of X) **. both the tapes bending member (A) and (B) -- both the aforementioned ****'s member (A) and (B) -- it supports to revolve to a side plate (A) and (B) similarly, respectively -- having -- both the ****'s member (A) and (B) -- the same -- beforehand -- a spacing -- it justifies and fixes

[0016] Tape bending member (A) 10 (the same is said of tape bending member (B) 10') As shown in drawing 3, it consists of a piece 11 of an end-face slide contact of a plate, and a piece 12 of a side edge slide contact of the plate of the outside. the piece 10 of an end-face slide contact The soffit touches the end-face flank of a plate 8 through a tape. the piece 12 of a side edge slide contact In **** and the front end section which bend the flat tape 5 gradually crosswise, and are stuck and pasted up on the side edge of a plate 8 (tape bending section 5") Gradually, it **'s lower, and is extending towards the edges-on-both-sides section of a plate, (extended section 12'), and the internal surface of parietal bone of the piece of a side edge slide contact is made to touch through the side edge and the tape 5 (5") of a plate 8 as there is the soffit almost flat-tapped with the soffit of the piece 11 of an end-face slide contact and it goes back.

[0017] a tape cutter -- 13 -- press -- a roll -- nine -- both -- a tape -- bending -- a member -- (A --) -- (B --) -- ten -- ten -- ' -- between -- allotting -- a thing -- it is -- drawing 5 -- being shown -- as -- side plate (B) handle section 14' which fixes to revolve free from 3' to a protruding piece 14, is the cutter knives which cuts a tape 5 crosswise, fixes to revolve similarly, and interlocks with a tape cutter -- W -- After a disconnection of a tape 5 sticks a tape over the edge section perimeter of a plate, it is performed, and a tape cutter 13 returns to the original position by deflation operation of spring 13" after a disconnection of a tape 5.

[0018] the above -- setting -- temporary -- both the ****'s member (A), when not forming the trough of the second half section wave of 7 and 7' a tape -- **** -- a tape -- five -- press -- a roll -- nine -- both -- **** -- a member -- (A --) -- (B --) -- seven -- seven -- ' -- the second half -- the section -- a wave -- a crest -- between -- letting it pass -- drawing -- the time -- a tape -- five -- a inferior surface of tongue (adhesion side) -- this -- ***** -- a upper limit -- a field -- touching -- pasting up -- derivation -- operation -- being difficult -- ** The above-mentioned evil can be eliminated by presence of the trough of the aforementioned wave.

[0019] moreover -- the above -- both -- **** -- a member -- (A --) -- (B --) -- seven -- seven -- ' -- the second half -- the section -- a wave -- a crest -- forming -- things -- drawing -- five -- being shown -- as -- a tape cutter -- 13 -- depending -- drawing -- inside -- a upper right -- a way -- **** -- a tape -- a disconnection -- facing -- a tape -- five -- drawing -- inside -- a lower part (**V) -- depressing -- In that case, the inferior surface of tongue (adhesion side) of a tape 5 touches and engages [paste up and] with the upper-limit side of the crest (7, 7') of the

aforementioned wave. In case it can prevent with [to the reel 6 of the tape 5 by the counteraction after a disconnection] a volume and repetition attachment work is carried out to the plate of two or more sheets by that cause, a tape 5 is pulled out from the rewinding reel 6 each time, and the operation which lets between the crests of the aforementioned press roll 9 and the aforementioned wave pass is not needed.

[0020] [Operating procedure] According to the size of the width of face of the tape 5 which should be stuck beforehand, it fixes so that width-of-face center-section 5' of a tape may be located in the center section of the spacing of side plate (A) 3 and side plate (B) 3' of a frame member, and it is a **** member (A). 7 and **** member (B) Width-of-face center-section 5' of the center section of the spacing of 7' and the aforementioned tape 5 is made in agreement.

[0021] first -- a tape -- attachment -- an implement -- one -- rewinding -- a reel -- six -- *** -- a tape -- *** -- a tape -- five -- press -- a roll -- nine -- both -- *** -- a member -- (-- A --) -- (-- B --) -- seven -- seven -- ' -- the second half -- the section -- a wave -- a crest -- between -- letting it pass -- up to -- having drawn -- a top -- the end face of a plate 8 -- reliance -- obtaining --

[0022] It is the *** member (A) of the tape attachment implement 1 about the side edge of after the aforementioned operation and the plate 8, for example, a multiple glass. 7 and **** member (B) It puts between 7' and inserts in between tape bending member (A) 10 and tape bending member (B) 10'.

[0023] Furthermore, it is made to scan in the orientation of <-Y which shows the tape attachment implement 1 in drawing 1 along with the end face of a plate 8. A tape 5 is pressed and pasted up on the end face of a plate 8 with the press roll 9, and it is a tape bending member (A). By the piece 12 of a side edge slide contact of 10 (and tape bending member (B) 10'), crosswise, the flat tape 5 is bent gradually, and the side edge of a plate 8 sticks and is pasted at the beginning.

[0024] in the corner section of a plate 8, the tape attachment implement 1 is scanned along with the extension wire of the end face of a plate -- making -- both the tapes bending member (A) -- the place which 10 and 10' protruded from the corner of the aforementioned plate 8 -- a tape -- attachment -- an implement -- one -- a degree -- an end face -- orientation -- 90 -- a degree -- rotating -- making -- a tape -- having stretched -- the status -- both -- *** -- a member -- (-- A --) -- (-- B --) -- seven -- seven -- ' -- a plate -- eight -- edges on both sides -- fitting in -- making -- and -- both -- a tape -- bending -- a member -- (-- A --) -- (-- B --) -- ten -- ten -- In the place around which the perimeter was made to wind, in the status that separate the front end side (both the ****'s member (A), (B)) of the tape attachment implement 1 from the end face of a plate 8, and a tape cutter 13 does not contact a plate, *** is put into a tape 5 by the tape cutter 13, and a tape 5 is cut. Attachment work is completed above.

[0025] In addition, it is not necessary to necessarily stick a tape over the edge section perimeter of a plate, and sticks only on the corner section, or can perform optionally sticking near [length orientation center-section] neighboring etc.

[0026] Like the above, it is constituted and a tape can be certainly stuck on the periphery section applied to the edges-on-both-sides section from the end face of a plate by making it scan along with the edge section of a plate.

[0027]

[Effect of the Invention] According to the tape attachment implement of this invention, the effect that adhesive tape can be certainly stuck with an easy means is done so, without the edge section applied to edges on both sides from the end face of a plate taking complicated technique.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the outline perspective diagram of the tape attachment implement of this invention.

[Drawing 2] It is the outline perspective diagram having shown relation of a **** member and a plate.

[Drawing 3] It is the outline perspective diagram having shown relation of a tape bending member and a plate.

[Drawing 4] It is the partial front view in X directional vision of drawing 1 having shown the frame member, and the rewinding reel and **** member of a tape attachment implement.

[Drawing 5] It is the frame member of a tape attachment implement, the tape cutter, and the partial rear view having shown the relation of a **** member (crest of a second half section wave) in Y directional vision of drawing 1.

[Drawing 6] It is drawing having shown relation of a press roll, a **** member (crest of a second half section wave), and a plate with the U-U line cross section of drawing 2.

[Description of Notations]

1 Tape Attachment Implement

2 Frame Member

3 Side Plate (A)

3' Side plate (B)

5 Tape

6 Rewinding Reel

7 **** Member (A)

7' **** member (B)

8 Plate (Multiple Glass)

9 Press Roll

10 Tape Bending Member (A)

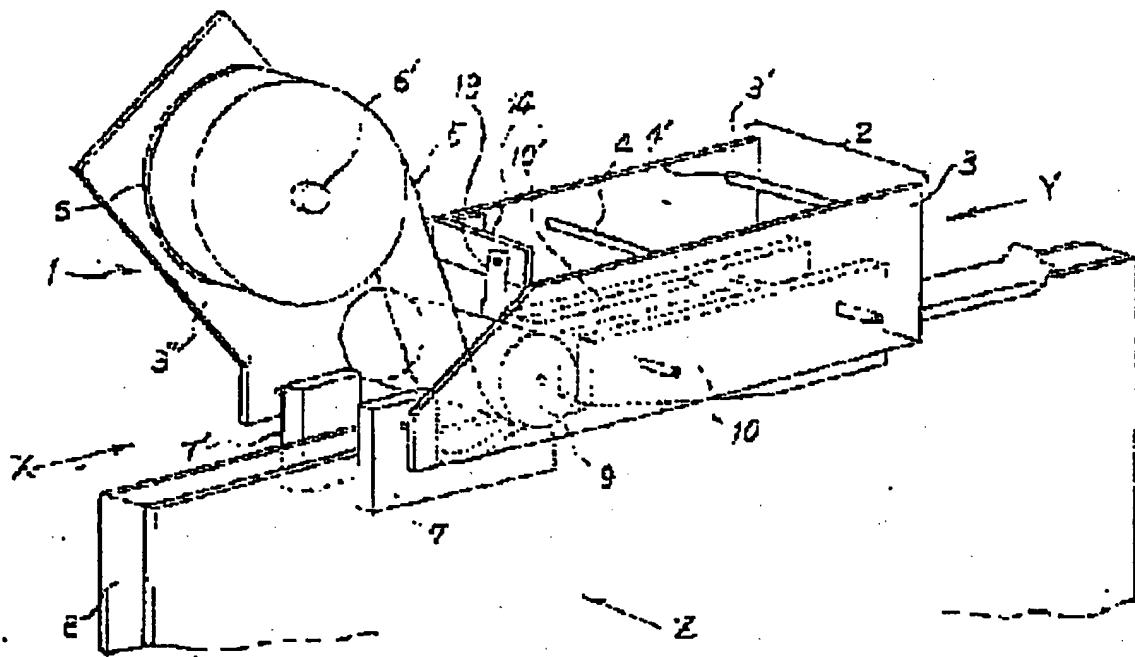
10' Tape bending member (B)

11 Piece of End-Face Slide Contact of Plate

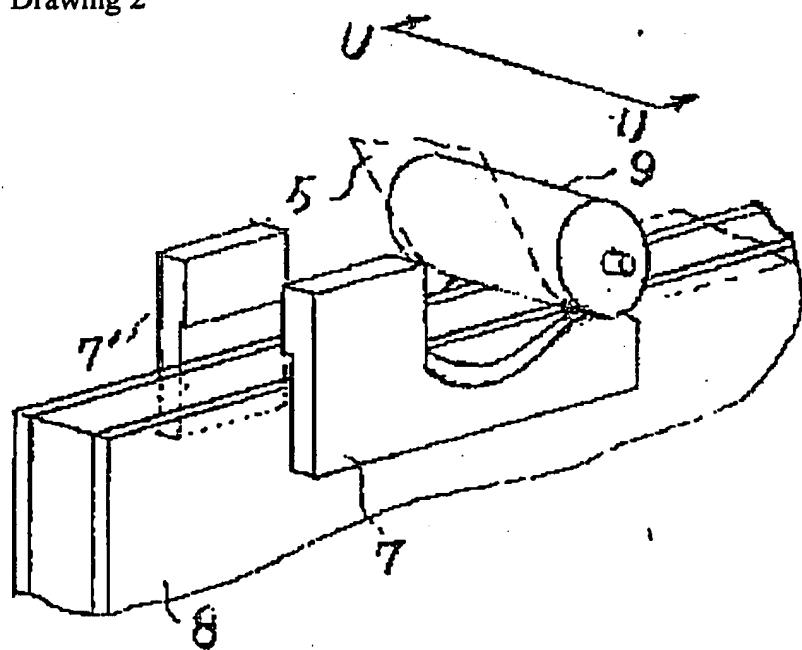
12 Piece of Side Edge Slide Contact of Plate

13 Tape Cutter

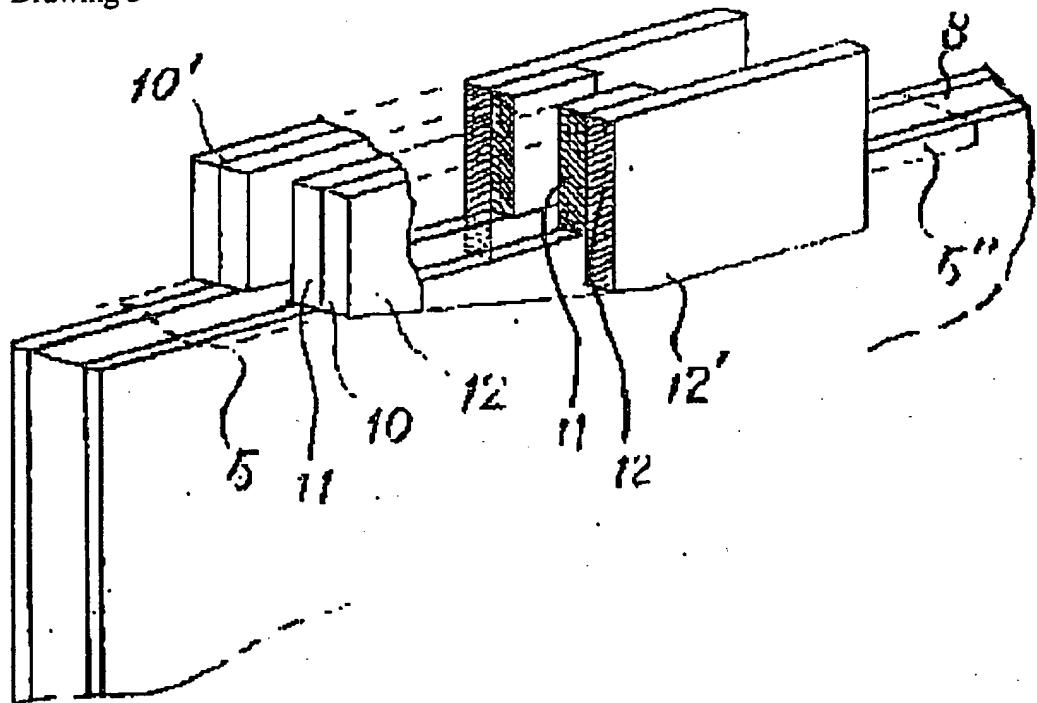
Drawing 1



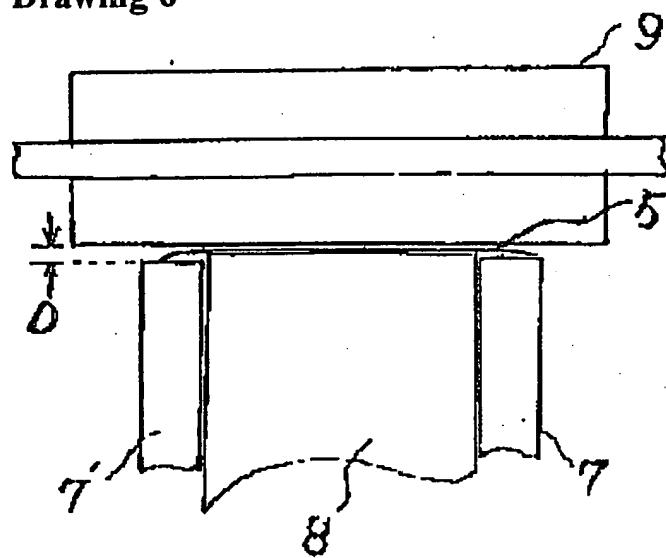
Drawing 2



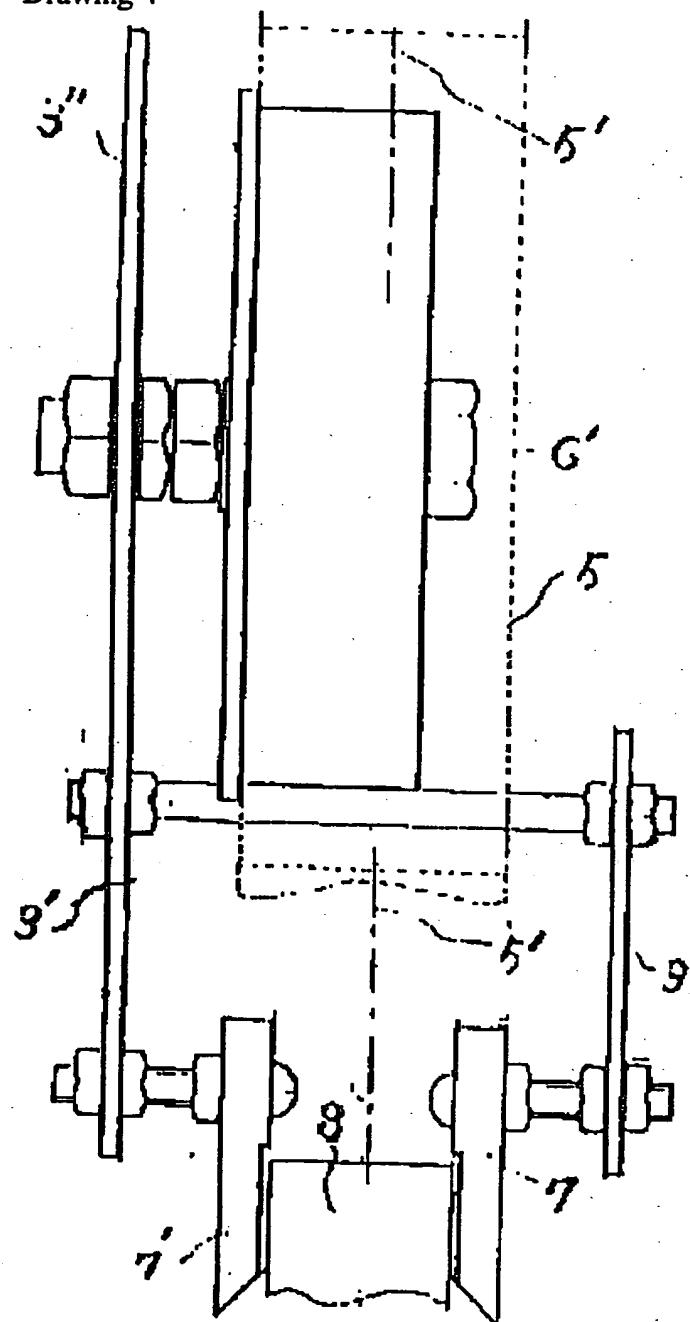
Drawing 3



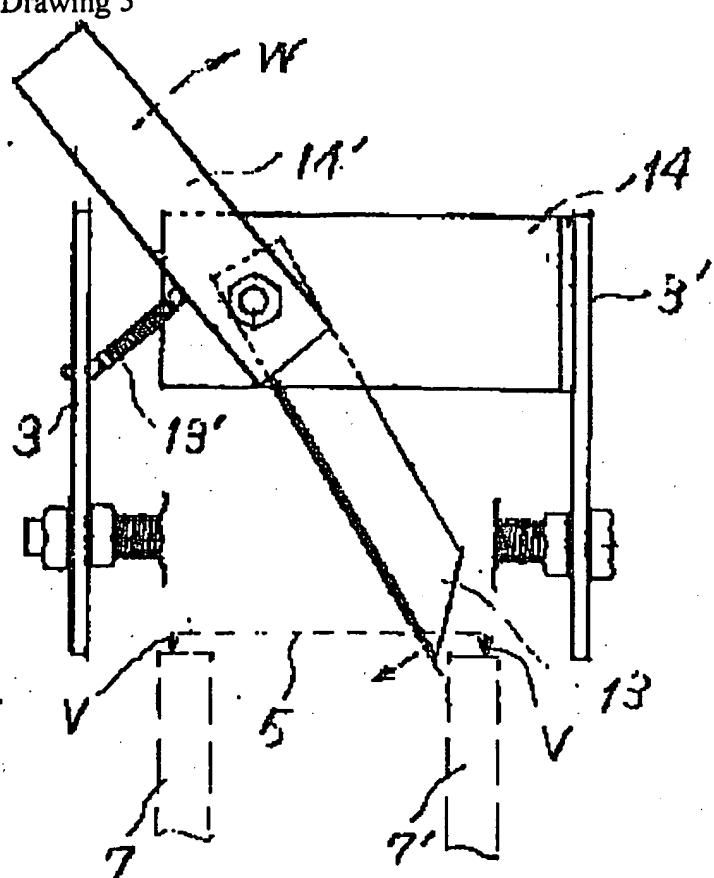
Drawing 6



Drawing 4



Drawing 5





(19)日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11)特許出願公開番号

特開平11-334981

(43)公開日 平成11年(1999)12月7日

(51)Int.Cl.*

識別記号

F I

B 65 H 35/07

B 65 H 35/07

D

審査請求 未請求 請求項の数4 OL (全5頁)

(21)出願番号

特願平10-146137

(71)出願人 000002200

セントラル硝子株式会社

山口県宇部市大字神宇部5253番地

(22)出願日

平成10年(1998)5月27日

(72)発明者 渡辺 博孝

北海道苫小牧市字勇払145 セントラル複

層硝子株式会社内

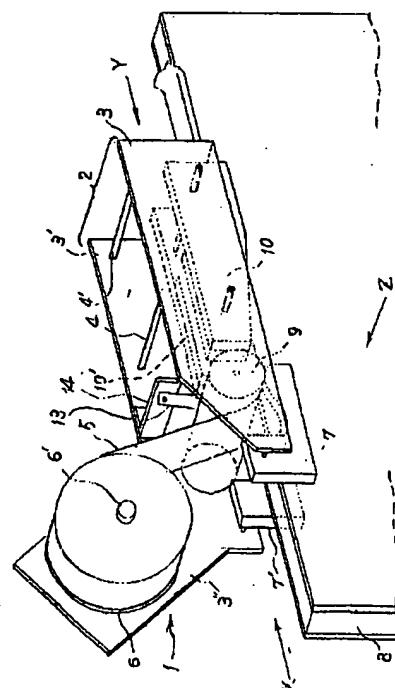
(74)代理人 弁理士 西 義之

(54)【発明の名称】 テープ貼着具

(57)【要約】

【課題】 板状体の端面から両側縁にかけての端縁部に、容易な手段で確実に接着テープを貼着する。

【解決手段】 板状体の端面から両側縁にかけての端縁部に保護用接着テープを貼着すべく、テープ貼着具を板状体の端面の一端に当がい、板状体の端面に沿って移動させつつ、テープを板状体の端縁部にわたり貼着するところの前記テープ貼着具において、内面に接着剤が塗布されたテープ巻体の巻き戻しリールと、リールから導き出したテープを板状体の端面部に押圧し、接着する押圧ロールと、端面部に接着されたテープ両端部を折り曲げて板状体端面および側縁にかけて貼着する一対のテープ折曲部材と、それら巻き戻しリール、押圧ロール、テープ折曲部材を一体に組込んだ枠部材からなるテープ貼着具。



【特許請求の範囲】

【請求項1】板状体の端面から両側縁にかけての端縁部に保護用接着テープを貼着すべく、テープ貼着具を板状体の端面の一端に当がい、板状体の端面に沿って移動させつつ、テープを板状体の端縁部にわたり貼着するところの前記テープ貼着具において、内面に接着剤が塗布されたテープ巻体の巻き戻しリールと、リールから導き出したテープを板状体の端面部に押圧し、接着する押圧ロールと、端面部に接着されたテープ両端部を折り曲げて板状体端面および側縁にかけて貼着する一対のテープ折曲部材と、それら巻き戻しリール、押圧ロール、テープ折曲部材を一体に組込んだ枠部材からなることを特徴とするテープ貼着具。

【請求項2】一対のテープ折曲部材は、夫々板状体の端面摺接片と、その外側の板状体の側縁摺接片とからなり、端面摺接片は、その下端がテープを介して板状体の端面両側部に接し、側縁摺接片は、幅方向に平坦なテープを漸次折り曲げて板状体の側縁に密着、接着させるべく、前端部においてはその下端が端面摺接片の下端とほぼ面一にあり、後方に向かうに従い、漸次板状体の両側縁部に向けて下傾、拡張しており、側縁摺接片の内面がテープを介して板状体の両側縁と接するようにしたことを特徴とする請求項1記載のテープ貼着具。

【請求項3】板状体の側縁部を挟込む前半部の立ち上がり部と、後半部の波形の谷および山からなる波形部より形成される一対の挟接部材を、前記波形の山が押圧ロールの下方に位置するように配し、かつ押圧ロールと波形の山の上端面との間に間隔を設けたことを特徴とする請求項1記載のテープ貼着具。

【請求項4】押圧ロール、テープ折曲部材間で適宜にテープを切断するテープカッターを設けたことを特徴とする請求項1記載のテープ貼着具。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、ガラス、セラミックス等の動性に乏しい板状体、好適には板ガラス、合せガラス、複層ガラス等のガラス窓材の保管、移送、施工時等において、その端縁部を保護するために、予め端縁部に保護用接着テープを貼着するためのテープ貼着具に関する。

【0002】

【従来技術とその解決すべき課題】例えば実公昭63-12131号には、施工に先立ち窓ガラスの板面周縁にテープを貼着する用具において、粘着テープのリール体を収容したケースよりテープを引出しつつ板面周縁に貼着し、板面内コーナー部においてはテープを折曲し、貼着できるようにしたテープ折曲貼着具が開示されている。該公知例は窓ガラス等の板表(裏)面周縁にテープを貼着するものであって、端面および両側縁にかけて貼着するものとは異なる。

【0003】また例えば実開昭61-151953号には、渦巻き粘着テープをケースから引出し、離型紙を剥離しつつ、前記粘着テープを板ガラスの端面に押え付ける案内溝によって貼着する渦巻き粘着テープの貼着器が、更に特開平3-28710号には、巻装粘着テープを、案内部材、ガイド部材により位置調整しつつ導き、転動ローラーによりガラス板等の端面に貼着する粘着テープの貼付け治具が開示されている。これら公知例は板ガラス等の端面にテープを貼着するものではあるが、端面および両側縁にかけて貼着するものではない。

【0004】本発明は、板状体の端面から両側縁にかけての端縁部に、殊更複雑な技術を要することなく、容易な手段で接着テープを貼着するテープ貼着具を提供するものである。

【0005】

【課題を解決するための手段】本発明は、板状体の端面から両側縁にかけての端縁部に保護用接着テープを貼着すべく、テープ貼着具を板状体の端面の一端に当がい、板状体の端面に沿って移動させつつ、テープを板状体の端縁部にわたり貼着するところの前記テープ貼着具において、内面に接着剤が塗布されたテープ巻体の巻き戻しリールと、リールから導き出したテープを板状体の端面部に押圧し、接着する押圧ロールと、端面部に接着されたテープ両端部を折り曲げて板状体端面および側縁にかけて貼着する一対のテープ折曲部材と、それら巻き戻しリール、押圧ロール、テープ折曲部材を一体に組込んだ枠部材からなるテープ貼着具である。

【0006】なお、前記一対のテープ折曲部材は、夫々板状体の端面摺接片と、その外側の板状体の側縁摺接片とからなり、端面摺接片は、その下端がテープを介して板状体の端面両側部に接し、側縁摺接片は、幅方向に平坦なテープを漸次折り曲げて板状体の側縁に密着、接着させるべく、前端部においてはその下端が端面摺接片の下端とほぼ面一にあり、後方に向かうに従い、漸次板状体の両側縁部に向けて下傾、拡張しており、側縁摺接片の内面がテープを介して板状体の両側縁と接するようにしたのである。

【0007】前記において、板状体の側縁部を挟込む前半部の立ち上がり部と、後半部の波形の谷および山からなる波形部より形成される一対の挟接部材を、前記波形の山が押圧ロールの下方に位置するように配し、かつ押圧ロールと波形の山の上端面との間に間隔を設けるのが好ましい。

【0008】更に、前記押圧ロール、テープ折曲部材間で適宜にテープを切断するテープカッターを設けるのが好ましい。

【0009】

【発明の実施の形態】本発明において、保護テープは板状のガラス、セラミックス類、例えば板ガラス、合せガラス、複層ガラス等のガラス窓材の保管、移送、施工時

等において、その端縁部からの欠け割れ防ぎ、該部を外部衝撃から保護するもので、テープ材質は特定するものではないが、市販される各種ポリエステルテープ、ポリオレフィンテープ、ビニルテープ等の樹脂テープ、亜鉛テープ、鉛テープ、アルミニウムテープ等の金属テープが適用できる。

【0010】以下実施の具体例を例示して本発明を説明する。

【テープ貼着具の構造】図1は、本発明のテープ貼着具の概略斜視図、図2は、挟接部材と板状体の係わりを示した概略斜視図、図3は、テープ折曲部材と板状体の係わりを示した概略斜視図、図4は、図1のX方向視における、テープ貼着具の枠部材、巻き戻しリールと挟接部材を示した部分正面図、図5は、図1のY方向視における、テープ貼着具の枠部材、テープカッター、および挟接部材の関係を示した部分背面図、図6は図2のU-U線断面図で、押圧ロール、挟接部材、および板状体のかかわりを示した図である。

【0011】テープ貼着具1において、枠部材2は、一方の側板(A)3と、他方の側板(B)3' と、両側板(A)(B)を掛け渡すべく適宜に配した係止軸群、例えば4、4' からなる。

【0012】テープ、例えば亜鉛テープ5の巻体を保持した巻き戻しリール6は、枠部材2の側板(B)3' の前方斜め上方に延出した延出片3" に回転自在に軸着し、軸6' の軸長方向に位置調整可能とするもので、図4に示すように、テープ5の幅の広さに応じ、テープの幅中央部5' が、枠部材の側板(A)3、側板(B)3' の間隔の中央部に位置するように調整、固定する。

【0013】巻き戻しリール6の下方には、枠部材の側板(A)(B)間に、挟接部材(A)7、および挟接部材(B)7' を正面(X方向)視で対象に配設し、両挟接部材(A)(B)により、板状体、例えば複層ガラス8の側縁を挟み込むようにする。挟接部材(A)7は側板(A)3により、挟接部材(B)7' は側板(B)3' により軸支され、夫々側板(A)(B)と近接、離隔可能に調整でき、両挟接部材(A)(B)の間隔の中央部と前記テープ5の幅中央部5' が一致するように、かつ板状体8の側縁に接することのできるように予め調整、固定する。両挟接部材(A)(B)により、テープ貼着具1を板状体8の端面に沿って横ぶれすることなく走査できる。

【0014】両挟接部材(A)(B)7、7' は、夫々側面視(図1のZ方向視)で、図2に示すように前半部の(図で左側)立上り部と、後半部の(図で右側)波形の谷、および波形の山からなる波形部からなり、前記波形の山の上方の位置に架設する如く押圧ロール9を配するもので、図6に示すように、押圧ロール9と波形の山の間Dは3mm前後の間隔を有する。押圧ロール9は前記側板(A)3と側板(B)3' を掛け渡す軸に回転自在に軸支されるもので、テープ5を板状体8の端面に押圧、接着さ

せる作用を有する。

【0015】押圧ロール9の後方で枠部材の側板(A)(B)間に、図3に示すようにテープ折曲部材(A)10、およびテープ折曲部材(B)10' を正面(X方向)視で対象に配する。両テープ折曲部材(A)(B)とも、前記両挟接部材(A)(B)同様に夫々側板(A)(B)に軸支され、両挟接部材(A)(B)と同様に、予め間隔、位置調整し、固定する。

【0016】テープ折曲部材(A)10(テープ折曲部材(B)10' も同様である)は、図3に示すように、板状体の端面摺接片11と、その外側の板状体の側縁摺接片12とからなり、端面摺接片10は、その下端がテープを介して板状体8の端面側部に接し、側縁摺接片12は、幅方向に平坦なテープ5を漸次折り曲げて板状体8の側縁に密着、接着させる(テープ折曲部5")べく、前端部においては、その下端が端面摺接片11の下端とほぼ面一にあり、後方に向かうに従い、漸次板状体の両側縁部に向けて下傾し拡張(拡張部12')しており、側縁摺接片の内面は板状体8の側縁とテープ5(5")を介して接するようとする。

【0017】テープカッター13は、押圧ロール9と両テープ折曲部材(A)(B)10、10' 間に配するもので、図5に示すように、側板(B)3' からの突片14に回転自在に軸着し、テープ5をその幅方向に切断するカッターナイフで、同様に軸着しテープカッターとともに連動する把手部14' をW→方向に操作することにより、テープ5を切断する。テープ5の切断はテープを板状体の端縁部全周にわたり貼着した後行うもので、テープ5の切断後、テープカッター13はスプリング13" の収縮作用により元の位置に復帰する。

【0018】前記において、仮に両挟接部材(A)(B)7、7' の後半部波形の谷を形成しない場合、テープ巻体のテープ5を、押圧ロール9と両挟接部材(A)(B)7、7' の後半部波形の山の間を通して導き出す際、テープ5の下面(接着面)が、該後半部の上端面に接して接着し、導出操作が困難となる恐れがあるが、前記波形の谷の存在により上記弊害を排除できる。

【0019】また、前記両挟接部材(A)(B)7、7' の後半部波形の山を形成することにより、図5に示すようにテープカッター13による図中右上方からのテープ切断に際して、テープ5は図中下方(↓V)に押し下げられるが、その際に、テープ5の下面(接着面)が前記波形の山(7、7')の上端面に接して接着、係着される。それにより、切断後の反動によるテープ5のリール6への巻きを防止でき、複数枚の板状体に対し繰返し貼着作業をする際には、その都度巻き戻しリール6からテープ5を引出し、前記押圧ロール9と前記波形の山の間を通して操作を必要としない。

【0020】〔操作手順〕予め貼着すべきテープ5の幅の広さに応じ、テープの幅中央部5' が、枠部材の側板(A)3、側板(B)3' の間隔の中央部に位置するように

固定し、また挟接部材(A) 7、挟接部材(B) 7' の間隔の中央部と前記テープ5の幅中央部5' は一致せしめる。

【0021】まずテープ貼着具1の巻き戻しリール6からテープ巻体のテープ5を、押圧ロール9と両挟接部材(A)(B) 7、7' の後半部波形の山の間を通して貼着具1の下側後方まで導き出したうえで、板状体8の端面に当てがう。

【0022】前記操作後、板状体、例えば複層ガラス8の側縁を、テープ貼着具1の挟接部材(A) 7、および挟接部材(B) 7' の間に挟み込み、かつテープ折曲部材(A) 10、およびテープ折曲部材(B) 10' の間に嵌込む。

【0023】さらに、テープ貼着具1を板状体8の端面に沿って、図1に示す←Y方向に走査させる。板状体8の端面に、テープ5は押圧ロール9により押圧、接着され、テープ折曲部材(A) 10 (およびテープ折曲部材(B) 10') の側縁摺接片12により、当初幅方向に平坦なテープ5が漸次折り曲げられて、板状体8の側縁に密着、接着される。

【0024】板状体8のコーナー部においては、テープ貼着具1を、板状体の端面の延長線に沿って走査させ、両テープ折曲部材(A)(B)10、10' が、前記板状体8のコーナーより食出したところで、テープ貼着具1を次の端面の方向へ90度回転させ、テープを張った状態で両挟接部材(A)(B) 7、7' を板状体8の両側縁に嵌合させ、かつ両テープ折曲部材(A)(B)10、10' を同様に嵌合させたうえで、前記同様に走査させればよい。全周を巻回せたところで、テープ貼着具1の前端側 (両挟接部材(A)(B)) を板状体8の端面から離してテープカッター13が板状体に当接しない状態で、テープカッター13によりテープ5に切筋を入れ、テープ5を切断する。以上で貼着作業が完了する。

【0025】なお、テープは必ずしも板状体の端縁部全周にわたり貼着する必要はなく、コーナー部のみに貼着する、あるいは四辺の長さ方向中央部近辺に貼着する等、随意に行える。

【0026】前記のごとく構成され、板状体の端縁部に沿って走査させることにより、テープは板状体の端面か

ら両側縁部にかけての周縁部に確実に貼着できる。

【0027】

【発明の効果】本発明のテープ貼着具によれば、板状体の端面から両側縁にかけての端縁部に、複雑な技術を要することなく容易な手段で確実に接着テープを貼着することができるという効果を奏する。

【図面の簡単な説明】

【図1】本発明のテープ貼着具の概略斜視図である。

【図2】挟接部材と板状体の係わりを示した概略斜視図である。

【図3】テープ折曲部材と板状体の係わりを示した概略斜視図である。

【図4】図1のX方向視における、テープ貼着具の枠部材、巻き戻しリールと挟接部材を示した部分正面図である。

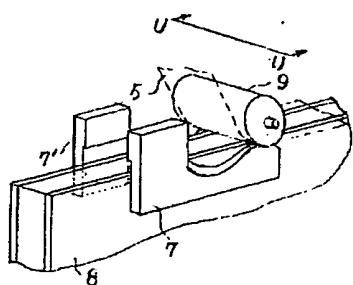
【図5】図1のY方向視における、テープ貼着具の枠部材、テープカッター、および挟接部材(後半部波形の山)の関係を示した部分背面図である。

【図6】図2のU-U線断面図で、押圧ロール、挟接部材(後半部波形の山)、および板状体のかかわりを示した図である。

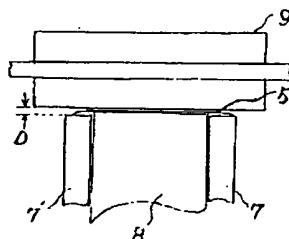
【符号の説明】

1	テープ貼着具
2	枠部材
3	側板(A)
3'	側板(B)
5	テープ
6	巻き戻しリール
7	挟接部材(A)
7'	挟接部材(B)
8	板状体(複層ガラス)
9	押圧ロール
10	テープ折曲部材(A)
10'	テープ折曲部材(B)
11	板状体の端面摺接片
12	板状体の側縁摺接片
13	テープカッター

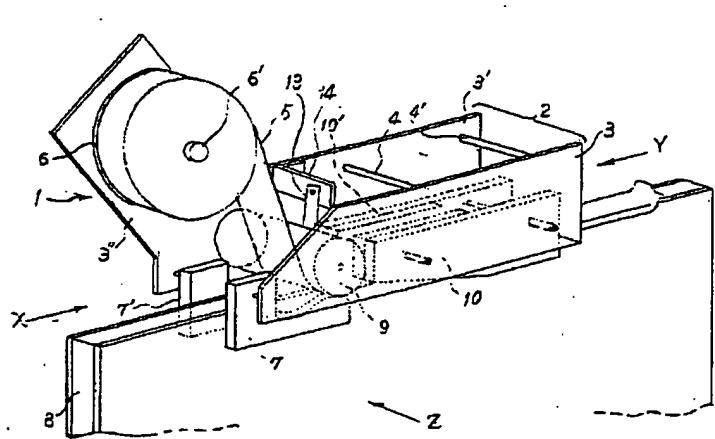
【図2】



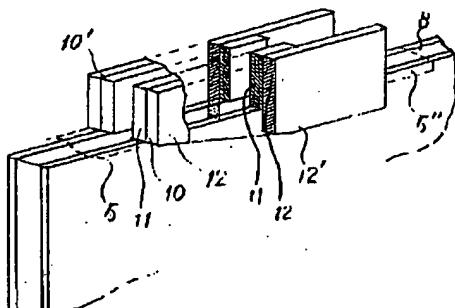
【図6】



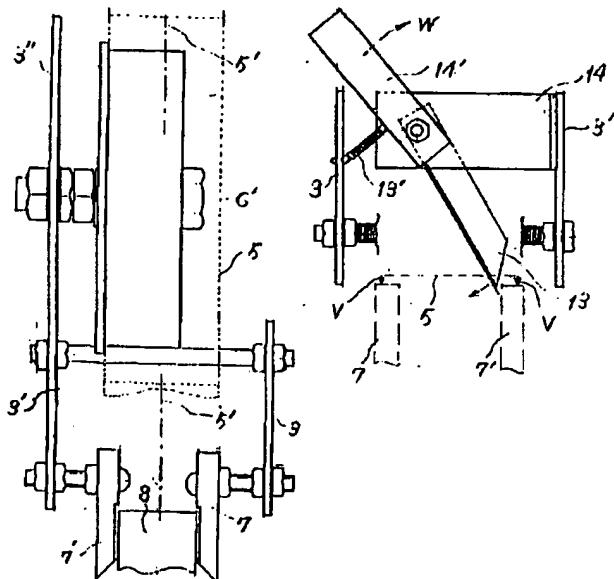
【図1】



【図3】



【図4】



【図5】

